

30 Days in ActiveWorlds – Community, Design and Terrorism in a Virtual World.

Andrew Hudson-Smith, Centre for Advanced Spatial Analysis, University College London.

1.0 Introduction

The ideology behind '30 Days in ActiveWorlds' was to fully document the development of a virtual environment from its beginnings, as a plot of virgin virtual land, to its conclusion in which it was hoped a community would have developed and with it a three dimensional virtual world. The aim was not to create a dialogue of life in the virtual environment, such as the well-documented "My Tiny Life" by Julian Dibbell or "The Cybergypsies" by Indra Sinha, yet the events that unfolded over the 30 Day period led to just such a documentation, and with it my conclusions about not only community and design in a virtual environment but also views on the increasingly blurred boundaries between what is real and what is virtual.

The title '30 Days in ActiveWorlds' came about from the free trial software of the ActiveWorlds server, upon which users can host their own world. The trial software operates for 30 days before timing out, enabling users to set up and run their own worlds and small communities before having to purchase a full server from ActiveWorlds. ActiveWorlds is a commercial multi-user system operating on a standard Windows based system with a modem connection. Distributed and run from San Francisco, the ActiveWorlds Universe currently consists of over 700 worlds with on average 400 users at any one time logged in. Users, or citizens, as they are known appear as avatars. Avatars are the citizen's graphical icon in the ActiveWorlds system, the choice of avatars range from a large biker looking male called 'Butch' to the petite female of 'Tanya' with many incarnations in-between. My chosen avatar in the Universe was 'Butch', the alter ego of 'Smithee'. My choice of 'Butch' was not a personal reflectance on my own real world appearance, heaven forbid! but nevertheless one that I normally adopted. I had trawled the then 423 worlds that made up the ActiveWorlds Universe for the previous 6 months as

part of my research at University College London into placing three-dimensional models of the urban environments on the web. The research, under the banner of 'Online Planning', was aimed at opening up the possibilities of placing an urban planning system online within a shared virtual environment, allowing citizen participation, online democracy and other similar utopian ideals. It is this research that led to the download of my own ActiveWorld, which I duly placed on an available Windows 95 machine in the corner of the office in London.

The idea of using my downloaded world to allow users a free reign to build, say or do whatever they desired in the virtual environment came in the middle of a telephone call from a journalist called Tony Durham. Tony rang from the Times Higher Education Supplement asking what I was up to, having read about my research in a previous month's Sunday Telegraph Magazine. As a researcher I was obviously keen to get my work as much exposure as possible, and the fact that the Times Higher Education section rang up was a great opportunity. So was born, mid conversation, the idea of opening up my server to the world and letting them build, say and basically do what ever they want, all in the name of 'research'. Everything that took place in the world would be logged, allowing us to see what was built when, said by whom and at what time. Essentially, it would allow me to log the development of a virtual world and community from day one, in high detail until its closure on day 30. Everything was set to go live on November 30th, 1998, with the Times Higher Education running a small article on it the following week, to announce its opening.

The world was set up on my Windows machine, entitled the 'Collaborative Virtual Design Studio' or 'CVDS' for short. It was the first world to log both building and conversation in a virtual environment and tied in well with my previous research. Upon entering a new world all the user is greeted with is an infinite space of virgin green land, meeting a blue mountain rich skyline. I set about putting up welcoming signs and an entry space at Ground Zero, so called as its at 0 North, 0 West on the ActiveWorlds co-ordinate system. I had previously contacted ActiveWorlds and informed them of my research and they were keen to help and extended my world out to 69N 69W, (the normal free world only extends to 25N 25W). This gave me a world approximately the size of Soho in London in which I needed to place a range of objects that the users could build with.

The main feature of ActiveWorlds is that users can claim land and build, building is carried out using a selection of predefined objects from windows, doors and walls to trees, shrubs and paving tiles. These objects can be cloned and placed on virtual land to create what is essentially a large virtual 'Lego' set. To aid users in my world a builders yard was set up, located 69N, 69W, in which 368 objects were laid out, ready to be selected and cloned to start off the building process. I was helped with the layout of the builders yard by two citizens I had met before in ActiveWorlds, namely Princess Tia and Dawny. Princess Tia and Dawny floated 50 meters above the building yard and painstakingly cloned and placed each object in position, ready for the public opening. While they were in the virtual world I returned to the real world to set up a web page to introduce the project and hooked

up our web-cam to stream live pictures of myself and the office into Ground Zero for the opening.

CVDS was, as far as I'm aware, the first world to open up without any guidelines or laws, the aim was to see what people built if they were allowed to build anything they wanted. As a test I left the server open to the world overnight, two days before the launch. Upon arriving at work and logging into the world I was greeted with two large signs, placed by an anonymous user. The first sign had an image linked in from a sex orientated web site and the second sign was text based linking the image with my mother. With the world set to go live on a University server and the work being covered by the Times Higher Education Supplement I hoped this wasn't a sign of things to come!

2.0 The First Steps

The space that makes up the ActiveWorlds Universe is sparsely populated with on average 0.5 users per world. To get a world noticed and populated there needs to be a hook, there's no point launching a world if no one comes to build, which unfortunately seems to be the norm within the ActiveWorlds Universe. There's a saying on the web, that 'if you build it they will come' (taken from the film 'Field of Dreams'), but in virtual worlds this is not necessarily true, especially if you haven't built the world but want them to build it for you. I decided that a building competition was the way to go, and a prize of one year's free citizenship to ActiveWorlds was on offer for the best design in the world after 30 days. The fact that the prize was a citizenship opened up the world for 'tourists' to build. Tourists are users of ActiveWorlds that haven't paid their \$19 annual fee to become a citizen. This leaves them as something of a third class citizen, indeed many worlds ban them altogether, and even if they were allowed to build their buildings would not be guaranteed to remain intact. Actively encouraging tourists into my world allowed them to compete for citizenship status, safe in the knowledge that my world was logged, and therefore backed up every night in case of any crime or vandalism.

The launch of the project consisted of Princess Tia and myself standing around at ground zero, looking up at the web-cam that was plugged in, streaming an image of myself 50 foot above the central region. An advert was placed by ActiveWorlds in AlphaWorld, the most popular of the worlds in the universe, and various messages were spammed across newsgroups. Princess Tia acted as a meeter and greeter, showing users round and letting them know that they could build what ever they wanted in the world, an automatic message also warned them that all conversation and building was logged. Dawny logged in from Pittsburgh, Pennsylvania, USA around 2pm Greenwich Mean Time and decided to act as a tourist representative from the world. She went out around the other worlds actively recruiting users to come into CVDS and start building. This began to give the project the momentum it needed and more importantly started the word of

mouth that would eventually build a complex social and structural world in the Windows 95 box in the corner of my room.

As part of the web site a daily news section was set up, to document the major events in the world, providing images of the buildings constructed on each day and displaying a map of the world so far. During day one 36 registered citizens and an unknown number of tourists placed a total of 6430 objects in the world. The number of tourists is unknown as they only count as one on the builders' list that was used to map the world every 24 hours. The amount of growth was surprising from the point of view that most ActiveWorlds are sparsely populated; CVDS had overnight become the third most popular world in the ActiveWorlds Universe. It also provided some interesting constructions for the news page and introduced users that would become regular faces, or avatars as the case maybe, for the next 29 days.

3.0 Virtual Terrorism

The first few days of growth went well and the research was generating interest from various branches of the media. On day 2 BBC Radio 3 dropped into Betty B's house, located west of Ground Zero. Betty, logging in from Amsterdam, had built up a house based on cubist design, although the interior was still basic it had a path with an American style mail box (linked to her hotmail account) and the beginnings of a well planted garden. Also a technology journalist from the Press Association in the United Kingdom, Lawrence, known as Lorca in CVDS, joined the world to write about the launch and how a new community was being built in cyberspace. With a deadline to meet an interview was carried out in Ground Zero and he was introduced to Dawny, Princess Tia and Betty B. Despite a tight deadline Lorca stayed in the world during the day and even remained after work when the office closed down. This was an indication of things to come, as a number of us would spend almost every waking hour in the world, building, talking and generally exploring what was possible for the duration of the project. Upon logging in, on day 4 I was greeted with 25 email messages and a stream of ICQs (a telegram message system) complaining that there was a user in the world knocking down buildings and placing thousands of objects. A then unknown user was running riot in the world, placing numerous objects and looking as if he intended to overload the world server. He did a good job as just as I arrived in work the server came to a halt and the world went offline. From examining the log files it was noticed that a single user had been logging on and off during the night and during a period of over 5 hours had placed over 85,000 objects in the world. The objects had been placed using automatic building software called 'hambot' which had been banned in some regions of the ActiveWorlds Universe, but not in mine as users could say and build what ever they wanted. It was a world without laws and if one user wanted to place 85,000 objects they were allowed to. However, the fact that it had crashed the main server, and thus essentially ended

the 30 Days project, it was decided that the objects placed would be cleared and the community put to a vote to see if they wanted laws put into place to protect the world. By the fourth day the community was about to set up its own police department, complete with call boxes and regular patrols.

The 85,000 objects were mapped for the news page and then cleared so the world could go back online, within a minute of the world going live users were coming back in and surveying the damage. Houses built by tourists had been ripped apart and a trail of damage lay across the world, as if hit by an earthquake. A group gathered around Ground Zero and begun to question what sort of person would do such a thing. Betty B mentioned that as the world was being logged that maybe it was done on purpose to see what their reaction was, suddenly I became suspect number one. Although a virtual world I realised that it was still possible to feel uncomfortable, the group of avatars gathered around me and accusations came thick and fast. I managed to talk the users round to seeing my point of view that it would have been pointless to vandalise my own world, however, the seed of doubt had been sown. As a plus point the vandalism occurred when Lorca was in the world so it made copy in the Press Association, TescoNet and Excite, bringing further interest in the project. Once restarted the world remained on an even keel until day 9 when a tourist going under the name of Jero logged into the world. Jero attracted the attention of Betty B, who was by then a core member of the community. Jero was asking questions about the vandalism incident from day 4 and it became evident from the nature of Jero's conversation that he was involved in the incident. Betty B sent me an ICQ message and I logged into the world. Upon meeting Jero he stated that he was the High Commander of the ActiveWorlds Terrorist Group and although he had not undertaken the vandalism himself he had issued orders for it to occur. Jero then issued a series of threats to hack into the main server hosting 30 Days in ActiveWorlds, and shut the world down. A message was sent to all the known users in the world that the world was on 'Def Con One' status with a new attack imminent, a group gathered at Ground Zero, looking towards the skyline and waited to see what would happen.

While Jero was logged on a trace was carried out on his IP number and ActiveWorlds.com informed of the threat. This was mainly to ensure that the main world server couldn't be hacked as it would have jeopardised our local network at University College London, not something I was keen to draw attention to. As a result of the IP trace ActiveWorlds.com contacted the Internet Service Provider (ISP) of Jero and obtained a contact number for the users account. The information was provided by the ISP due to the number of complaints that ActiveWorlds.com had regarding a number of reoccurring IP numbers. Apparently the ActiveWorlds Terrorist Group had been quite active in the proceeding months. ActiveWorlds contacted Jero, or to be more precise, Jeros' father in Vancouver, Canada. Legal action was threatened and Jero, a 15-year-old teenager logged in from his bedroom, had his computer taken away from him. The computer was not however removed from Jero before he could issue one final threat. Jero logged into CVDS for one final time on Day 11, he teleported to my location and issued the threat that I had upset the wrong person and the group would be taking imminent action

against me. Knowing he posed no serious threat I ejected him from the world and thought that that would be the last I saw of him. Within half an hour I had lost all internet access from my personal machine at University College London, the world remained online but I couldn't even pick up my email. I remained unable to connect for over 6 hours while my Internet connection was restored, a hacker had entered my machine via my own personal web server and disabled all my network card settings.

4.0 Virtual Coffee – Community in 30 Days

Community is central to the development of all virtual worlds, whether they are purely text-based systems such as LambdaMOO or three-dimensional virtual worlds such as ActiveWorlds. A system will either thrive or decline according to the size and enthusiasm of its community and 30 Days in ActiveWorlds was no exception. By the 3rd day a group of 8-10 users were becoming regular builders in the world.



Figure 1. Group of avatars at Ground Zero of '30 Days in ActiveWorlds'.

Figure 1 illustrates a group of the users of 30 Days. The photograph was captured on the final day of building, by which time a core community was firmly in place.

The names on the image are difficult to decipher but the users, as in real life, can be identified from their appearance alone. Dawny adopted the Tanya avatar with long flowing red hair and the rather 1970's green dress, Betty B on the other hand chose the Rachel with blonde hair tied in a ponytail. Lorca always logged in as James and Stick chose Hotep, walking around the world in his Egyptian outfit. The users had over 20 avatars to choose from and each person adopted a certain look, essentially creating their own identity in the virtual world. In more populated worlds the limited choice of avatars limits the ability to create one's own identity but in '30 Days' with its 8-10 core users it allowed each of us to have our own look. The limited range of avatars can be restricting compared to text-based virtual worlds. For example, in LambdaMoo users create their own identity through textual expression, allowing each to create their own unique personality in the environment. 30 Days allowed the avatars to become associated with each person and in a sense each avatar began to resemble a friendly face when entering the world or walking in on one of the social gatherings that took place. The exception to each person's use of a set avatar was National Butch Day, organised by Stick. Stick organised the day via a series of email and telegrams informing users that they were required to adopt the Butch Avatar for the duration of day 20. Butch was selected, as he was my own chosen identity in the world. I was blissfully unaware of the nature of the day until logging in as normal and finding a group of users around Ground Zero all with the Butch avatar. My initial confusion, by not having recognisable faces to identify with, was greeted with much amusement and provided the opportunity for numerous Smithee impressions by the members of the community.

Such incidents underline the sense of community that developed in '30 Days'. As with many descriptions of virtual worlds the reader often gets the impression that they really had to be there to appreciate the sense of involvement. 'Being There' essentially sums up the feeling of community involvement and excitement in the world. It was a feeling of being involved in something that had the potential to become part of the history of the development of virtual worlds and community. A frontier attitude developed, one of shaping new worlds and seeing what we could do, logging into the world started to feel like arriving home. I would leave my small flat in North London every day, catch the tube to Kings Cross Station, arrive in work and log in. As my avatar appeared at Ground Zero I would be greeted by upward of 8 users already logged in. Each of these individuals would bid me good morning, afternoon or evening, according to their real world location, and we would embark on the daily ritual of looking at the new buildings and putting the world to rights over virtual coffee. This feeling of home being continued over the Christmas period. A Christmas tree was planted at Ground Zero, decorated with flashing lights and surrounded by presents. Shortly after my real world Christmas lunch I sneaked away and logged into my laptop that was set up at my parents' house in the country. Surprisingly, I found a couple of users logged in and we decided to hold an impromptu carol service around the Christmas tree. We all gathered around and linked in some MIDI-based music to the world, allowing us to hear the carols. First up was Oh Come All Ye Faithful, which we subsequently sung or rather, typed. My family, upon finding me logged on and typing Christmas

Carols were slightly concerned as to why rather than watch the traditional Queen's Speech I was logged into a virtual world with virtual carols and virtual presents. They may have had a point!

The web-cam, streaming pictures of both myself and the machine the world was running on, was constantly on and after a while I tended not to notice that it was there at all. It was however noticed by the members of the world and even by the second day screen grabs from my web-cam were appearing around the world. In one incident the live web-cam was copied onto four sides of a cube and placed on top of a column looking over the world. Around the column were images of avatars with their hands raised to my image in praise. It gave the web-cam an almost deity aspect with the images looking out over the world that I set up. Over the coming weeks the web-cam became a focus for certain members of the community. One member, who for names sake we will call James, logged in on the 12th day and asked me to come and look at his new home he had built. Such requests were normal as buildings were central to the nature of the world, I wasn't however prepared for what would greet me when I walked into his house.

Upon walking into his lounge all I could see were pictures of myself pasted onto the walls. The pictures had been grabbed from the web-cam and placed on an outside web server to hotlink back into the world. They were grabs of me undergoing my normal office based existence and as such, at least in my view, weren't too interesting. A couple of them had me with a cup of coffee, one with a chocolate bar and a few while I sat and ate my lunch. Each of these images had captions attached such as 'Smithee loves coffee' or in the case of an image of my empty chair 'Where is our leader?' When James asked for my views on his new house I was lost for words. The question that entered my mind was why? It then dawned on me that while I was looking at the house and the images of myself in the virtual world I was also being watched live on the web-cam. James asked why I was looking shocked, to which I blamed an email I had been reading and not the fact the he had images of my real world self all over his lounge wall.

After finding the images in James's lounge I began to have the feeling of being watched and decided to temporarily take the web-cam offline for a couple of days, with the blank screens on the web-cam blamed on a technical error. While out of the office my colleague took a phone call from James, who asked him to reconnect the web-cam without telling me so I could be watched when I came back into the office. My colleague refused and told me what had happened on my return. I suddenly realised that I had inadvertently opened myself up completely to the online world. My telephone number and location was on our main research website and images of myself were beamed live into the world. Although the intentions were to ground the research and give it a human face I felt that a line had been crossed between the virtual world that I had set up and the real world in which I worked.

I logged into the world and confronted James, who had by then informed other members of the world that he had phoned my office. I stated my worries and that in

my view virtual is virtual and real is real. The members of the community didn't seem to share my concern, yet I somehow felt that a line had been crossed and the web-cam had become something that was distracting from the purpose of the world rather than aiding it. The web-cam remains offline to this day, although images grabbed from it can still be seen in the world.

5.0 Spatial Development

The only sections of the world that I personally created in '30 Days' were Ground Zero and the Builders Yard. By the end of day 30, 27699 objects, placed by 49 registered users and an unknown number of tourists made up the world.

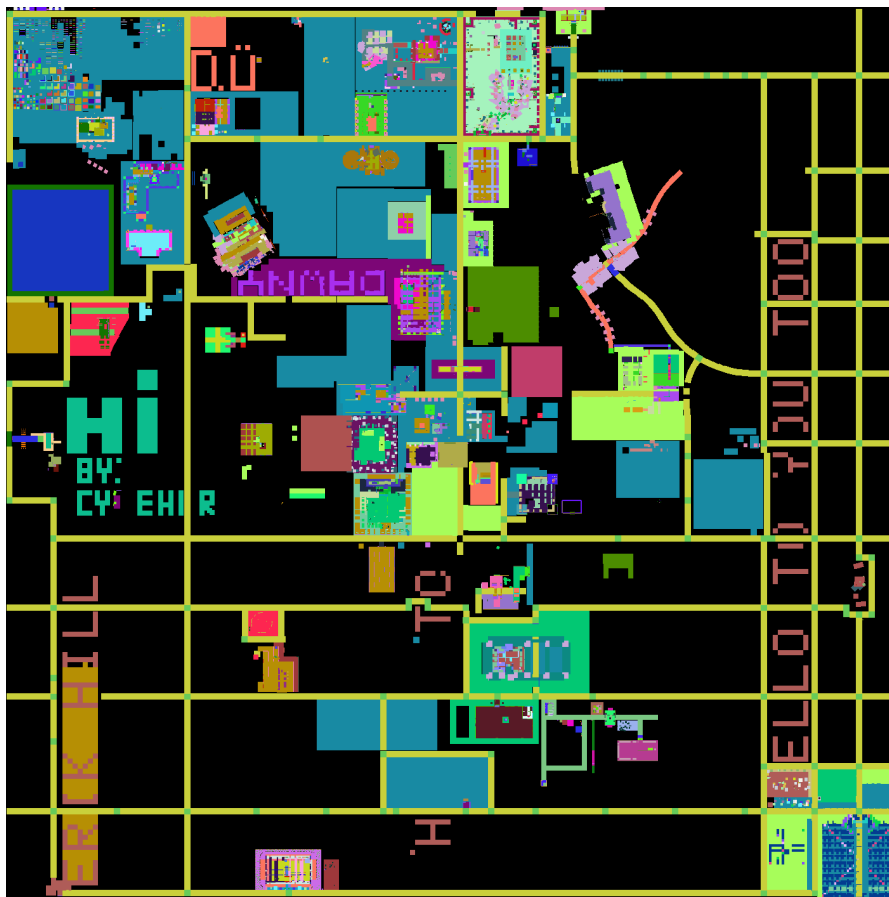


Figure 2. Map of the final days building in '30 Days in ActiveWorlds'

Figure 2 illustrates the final map of the world, with its buildings and infrastructure clearly visible. The world consisted of a number of houses, nightclubs, museums, bars, health centres and even a lover's lane, complete with an adjacent motel. The majority of the structures mirrored reality, or rather an utopian view of reality. The world consists of a number of country cottages with long tree-lined paths leading to a rustic front door and into an open space with a roaring open fire. Wooden American style lodges are also prevalent standing side by side with skyscrapers made out of glass and floating castles. The majority of these structures have doorways, windows, and flights of stairs or escalators. Yet in the virtual world there is no need for doorways or stairs as avatars can walk through walls and fly up to reach new floors. Indeed, the navigation system of ActiveWorlds makes the climbing of flights of stairs notoriously difficult with the avatar often getting stuck and being forced to fly. Stairs, door and chairs (avatars are unable to sit) are all part of the standard object set and this has a direct influence on the structures built in the world. As such ActiveWorlds can be seen as a huge construction set with a set number of objects. Linked with the nature of the object set seems to be an aim of users to create structures that mirror the real world as much as possible given the constraints of the system. An example of this can be seen in the Dark Night Bar. The bar has a gent's toilet, complete with urinals, washbasins and a mirror. None of the objects are for obvious reasons operational but they add to the level of immersion in the world. Similar is the grid pattern road layout that criss-crosses the world. The road network developed between the 6th and 10th day, aimed at influencing the development of the world and extending its development along the newly placed highways. This was a highly labour intensive exercise, especially when one considers that there are no cars or vehicles in ActiveWorlds. Part of the reason for the construction was that the developer knew that the world was mapped every 24 hours with a new image placed on the web sites news page. The prospect of seeing ones creations mapped led to a spate of incidents known as satellite writing. Satellite writing is text that although not distinguishable from the ground appears when the world was mapped, in the same way as the Nazca Lines in the Peruvian Desert are only discernible from the air. Mapping the world each night was like taking a satellite view of the world as it developed and thus revealing structures that could not be seen from the ground. The first words to appear were 'Hi' on day 6, by day 7 the words 'By Cyberhar' had been added. Cyberhar was also the architect of the CyberHar Castle and an Alien made out of coloured glass in the northern reaches of the world. All of these structures have been lone creations. Lovers Lane is the only creation in the world that engaged the whole community. Lover Lane was set up by Dawny and her real life partner Ken as a romantic area of the world whereby love poems and more importantly photographs of partners could be posted. With input from the community it transformed into an area of general pictures of each other and provided a focus point to find out about members of the '30 Days' community. The photos even extended to images of peoples pets, family and friends, essentially giving the world a human face.

Lovers Lane was a section of the world built by the community for the community, where as Stick worked on a lone build project for the benefit of an external community. Stick's Community Church was built specifically for the purpose of prayer in '30 Days'. The Church resembles a Victorian style English Christian Church, complete with bell tower, stain glass windows and a church organ. Although built in '30 Days' it wasn't aimed at its internal community, instead it was built for the youth section of the Alpha Church, based in Brompton, London, specifically for the Sunday School section. It was actively used for meetings and as such represents the only structure in the world that served a purpose outside of the virtual environment.

6.0 '30 Days II' and onwards.

From the outset the fate of the world after the '30 Days' was clearly stated on the web page, it was in the path of an incoming asteroid and would be destroyed. This linked back to the first ActiveWorld, AlphaWorld, which was similarly wiped out in an cataclysmic event. In reality of course all would happen would be that the server next to my desk would be reset and the world utilised for other research. However, towards the end of '30 Days' members of the community made it clear that they wanted the world and its community left intact. Due to its success in gaining media attention ActiveWorlds.com granted a free years licence for the world which enabled the world to be kept running. This extension of the world was marked by the launch of 30Days II, in which it was planned that rather than use the existing object set, users could build their own objects and import them into the world. A web site was created and linked to various 3d software packages and information on making objects for ActiveWorlds, a task that is by no means easy. A new prize was placed on offer, a CD-Rom version of ActiveWorlds, which allowed high-resolution textures, and the world continued to be mapped and logged.

Only 5 objects were submitted, a Condom Machine (to be placed by Lovers Lane), a Moon, a Park Bench and a Carousel. The low number of objects illustrates the difficulty in making custom objects and the majority of users continued to build with the standard object set from the Builders Yard. Mid-way through 30 Days II I started a new contract at work and although still mapping the world I was not able to log in 8 hours a day as I had been during the previous 30 Days. The number of users of the world began to decline and eventually the world was only populated by 2-3 users at its peak. The world therefore became another empty world in the ActiveWorlds Universe and begun to resemble a ghost town, a feeling that is present in the many areas of ActiveWorlds. '30 Days' saw rapid growth, initially in the physical structure of the world and then in its community. Once the users had built their houses, nightclubs or what ever took their fancy the world became increasingly social and the rate of building declined. The worlds 'hook' was that it would be logged and mapped for 30 Days with a prize at the end, despite the communities initial intensions to keep things running the members moved

elsewhere. Some of them moved onto other multi-user systems such as Everquest by Verant Interactive, Inc. Stick continued to use the Church for a year before his membership to ActiveWorlds expired, Lorca caught up on all the work he had missed while being drawn into the experiment. Dawny and Ken decided to get married in the world which was set to be the first '30 Days' reunion with Stick acting as the Virtual Vicar. Unfortunately Dawny and Ken split up and the wedding never took place. Dawny recently got back in contact to let me know that Ken had died of a heart attack and asked to re-enter CVDS so she could see what he built in Lovers Lane, as such it now stands a memorial to his work in the world. Other users set up their own worlds in the ActiveWorlds Universe and the central region of CVDS was cleared so that other research could take place on the server.

So what did 30 Days achieve? It was the first fully mapped and logged world and the maps have appeared in a range of publications documenting the history of Virtual Worlds, but maybe more importantly it allowed a community to develop, and for a short time thrive, all from a standard personal computer in the corner of the office.